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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,275	03/08/2001	Paola Belloni	BOE01 016	6581
7590 08/27/2004			EXAMINER	
Duane Morris LLP 1667 K Street NW Suite 700 Washington, DC 20006			PAYNE, SHARON E	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,275

Applicant(s)

BELLONI ET AL.

Examiner

Sharon E. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-75 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 41-65 and 67-75 is/are rejected.
- 7) ☒ Claim(s) 66 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0604.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The indicated allowability of claims 64 and 65 is withdrawn in view of the newly discovered reference(s) to an illumination system resulting in downward lighting. Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claim 64 is objected to because of the following informalities: 1) the words “, the space” should be inserted after “carrier plate” in line 2; and 2) the phrase “cover plate” in line 4 should be “carrier plate.” Appropriate correction is required.

3. Claim 65 is objected to because of the following informality: the phrase “cover plate” in line 2 should be “carrier plate.”

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 69 and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagatani et al. (U.S. Patent 5,863,114).

Concerning claim 69, Nagatani et al. discloses a support structure (Fig. 19), a light guide forming a cavity (Fig. 19), a lamp (reference number 33-1) for directing light into the cavity (Fig. 19), a carrier plate (reference number 34J) carried by the support structure and defining a generally smooth light emitting surface of the cavity through which light is output (Fig. 19) and

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an optical component (reference number 61) carried by the carrier plate (Fig. 19), the optical component having a light-refractive structure and being formed by one or more light permeable elements (Fig. 19).

Regarding claim 71, Nagatani et al. discloses the portion of light influenced by the plural optical components having not previously passed through one of the plural optical components having light transmitting properties (Fig. 19).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 41, 42, 45, 46-47, 50, 52-56, 58, 60, 62, 67-68 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. (U.S. Patent 5,863,114).

Regarding claim 41, Nagatani et al. discloses a light unit including a support structure (reference number 31, top), at least one hollow light guide with a cavity (Fig. 19), at least one

lamp (reference number 33-1) for directing light into the cavity (Fig. 19), optical components carried by said support structure (Fig. 19, top) said components having light directing properties for influencing the beam path of the light output from the lamp (Fig. 19), at least one of the optical components (reference number 61) being a light permeable component having a medium with a first index of refraction (the prism plate 61) with a medium of a second index of refraction different from the first (air, Fig. 19), the light permeable component being part of a light output device (Fig. 19) and the boundary surface being provided with a light-refractive structure for deflecting light in at least one plane directed perpendicular to a light exit face (Fig. 19), so that the light intensity distribution curve of the light emerging at the light exit face is influenced in this plane (Fig. 19), at least one of the optical components of each light unit being a light refractive structure (reference numbers 34, 34I, 34J, 34G etc.), the element being mounted on the support structure and being dimensioned so that elements of the same type are interchangeable among the light units of the system (column 5 in lines 30-31, lines 40-45, lines 65-67), whereby the light emission properties of the units may be changed by interchanging elements of the same type having different optical properties (column 5 in lines 30-31, lines 40-45, lines 65-67). Nagatani et al. does not specifically disclose a plurality of or a system of light units.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of elements disclosed in Nagatani et al. to form a system, each element having different light emission properties (column 5 in lines 30-31, lines 40-45, lines 65-67). Since the elements of Nagatani et al are well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of the elements to increase light output. See M.P.E.P. 2144.04.

Concerning claim 42, Nagatani does not specifically disclose a plurality of support structures.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of support structures having the same dimensions for receiving the element. Since the support structure is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of support structures in the Nagatani et al. reference to support several optical elements. See M.P.E.P. 2144.04.

Regarding claim 45 Nagatani et al. discloses the light permeable component comprising one or more plate elements having light refractive structures that affect the light emission properties of the light unit (Fig. 19).

Concerning claim 46, Nagatani et al. discloses the refractive structure of the plate element essentially prevents a light emission above a limited angle relative to the perpendicular vis a vis light exit face in at least one plane perpendicular to the light exit surface so that the shielding of light emerging at the light exit face is produced in this plane. (This aspect is true of all refractive structures; see Snell's Law.)

Regarding claim 47, Nagatani et al. discloses the support structure including a light permeable plate (reference numbers 34I and 34J) and the plate elements rest on the light permeable plate (Fig. 19).

Regarding claim 50, Nagatani et al. discloses varying the optical properties by using different optical components on the support structure (column 5 in lines 30-31, lines 40-45, lines 65-67). Nagatani does not specifically disclose a plurality of units. Making the support structure of a group of light units of the system have the same dimensions and the light emission properties be different according to the optical properties of at least one of the optical

components being mounted on the support structure is considered to be an obvious variation in design. Since the support structure is well known in the art it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a plurality of support structures. Since optical components of different optical properties shown in Nagatani et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to use optical components with different light emission properties on the various support structures to vary the light emission properties of each optical system.

Concerning claim 52, this claim constitutes functional language that is not given patentable weight. See M.P.E.P. 2114.

Regarding claim 53, Nagatani et al. discloses at least two light permeable components with a light refractive structure (reference numbers 38 and 61), the two light permeable components being arranged in a stack (Fig. 19). The portion of the claim starting with "to create" and continuing until the end of the claim constitutes functional language that is not given patentable weight. See M.P.E.P. 2114.

Concerning claim 54, Nagatani et al. discloses the light permeable component being a plate element (Fig. 19) and the plate elements being interchangeable to create different lighting effects (column 5 in lines 30-31, lines 40-45, lines 65-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a group of light units with support structures with the same dimensions (see M.P.E.P. 2144.04) with the light output face by which light is coupled out from the hollow light guide being different for at least two different light units of the group. (It would be obvious to use the different, replaceable components of Nagatani et al. in several apparatuses of Nagatani et al. to vary the light output among the apparatuses.)

Regarding claim 55, Nagatani et al. discloses indoor light units (column 10, lines 50-55).
(Liquid crystal display units are generally used indoors.)

Concerning claim 56, Nagatani et al. discloses a support structure having a light permeable plate (Fig. 19), at least one hollow light guide with a cavity (Fig. 19), at least one lamp (reference number 33-1) for directing light into the cavity (Fig. 19), one or more optical components carried by the light permeable plate (Fig. 19, reference numbers 40 and 61), the optical components having light directing properties for influencing the beam path of the light output from the lamp (Fig. 19), at least one of the optical components (reference number 61) being a light permeable element having a medium with a first index of refraction (reference number 62) and having a boundary surface with a medium of a second index of refraction different from the first (air, Fig. 19), the light permeable element being received on the light permeable plate of a light output device of the unit (Fig. 19) and the boundary surface being provided with a light-refractive structure for deflecting light in at least one plane directed perpendicular to a light exit face of the output device so that the light intensity distribution curve of the light emerging at the light exit face is influenced in this plane (Fig. 19, reference number 61) and a cap reflector (reference number 31b) mounted on the structure to reflect light in the light guide through the light permeable element (Fig. 19) and at least one of the optical components being an element that is dimensioned so that it can be used in any one of the light units of the system (column 5 in lines 30-31, lines 40-45, lines 65-67). Nagatani et al. does not disclose a plurality of indoor light units which have different light emission properties.

Using a plurality of light units is considered to be an obvious duplication of parts. Since the light system is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of them. See M.P.E.P. 2144.04.

Making the indoor units have different light emission properties is considered to be an obvious variation in design. Since Nagatani et al. discloses replacing optical components of one system with an optical component with different optical properties (column 5 in lines 30-31, lines 40-45, lines 65-67), it would have been obvious to one of ordinary skill in the art at the time the invention was made to use components of different optical properties in a plurality of systems with the same dimensions to have a lighting system with varying output across the system.

Regarding claim 58, Nagatani et al. discloses the light permeable element as a plate element which is secured to the light permeable plate of the support structure (Fig. 19).

Regarding claim 60, Nagatani et al. discloses at least two light permeable components with a light refractive structure (reference numbers 38 and 61), the two light permeable components being arranged in a stack (Fig. 19). The portion of the claim starting with “to create” and continuing until the end of the claim constitutes functional language that is not given patentable weight. See M.P.E.P. 2114.

Regarding claim 62, Nagatani et al. discloses the first-mentioned element component can be replaced by a second element of the same dimensions and different properties, so that by replacing the first element with the second element, the light unit will have different light emission properties (column 5, lines 30-65).

Concerning claim 67, Nagatani et al. discloses a light guide forming a cavity (Fig. 19), a lamp (reference number 33-1) for directing light into the cavity (Fig. 18), and plural optical components located outside the cavity or at the periphery thereof (Fig. 18), each of the plural optical components having different light directing properties for influencing the beam path of a portion of the light directed into the cavity (Fig. 18), wherein the optical components are interchangeable (column 5 in lines 30-31, lines 40-45, lines 65-67). Nagatani et al. does not disclose a plurality of units.

Using a plurality of units is considered to be an obvious duplication of parts. Since the unit disclosed in Nagatani et al. is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of the units to generate more light. See M.P.E.P. 2144.04.

Making the optical components interchangeable among the units is considered to be an obvious variation in design. Since the components are shown to be interchangeable (column 5 in lines 30-31, lines 40-45, lines 65-67), it would have been obvious to one of ordinary skill in the art at the time the invention was made to make them interchangeable among each unit to have a system with components exhibiting different optical qualities.

Regarding claim 68, Nagatani et al. discloses a light guide forming a cavity (Fig. 20), a lamp (reference number 33-1) for directing light into the cavity (Fig. 18), and plural optical components exteriorly of said cavity or at the periphery thereof (Fig. 18) each having different light directing properties for influencing the beam path of a portion of the light directed into the cavity (Fig. 18), a method of changing the light emission properties of a unit by interchanging optical components having different light directing properties (column 5 in lines 30-31, lines 40-45, lines 65-67). Nagatani et al. does not disclose a plurality of units.

Using a plurality of units is considered to be an obvious duplication of parts. Since the unit disclosed in Nagatani et al. is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of the units to generate more light. See M.P.E.P. 2144.04.

Concerning claim 72, Nagatani et al. discloses a light guide forming a cavity (Fig. 19), a lamp (reference number 33-1) for directing light into the cavity (Fig. 19) and plural optical components located outside the cavity (reference numbers 40 and 61, Fig. 19), each of the plural optical components having different light directing properties for influencing the beam path

of a portion of the light directed into the cavity that has not previously passed through one of the plural optical components having light transmitting properties (Fig. 19) wherein the optical components are interchangeable (column 5 in lines 30-31, lines 40-45, lines 65-67).

Using a plurality of units is considered to be an obvious duplication of parts. Since the unit disclosed in Nagatani et al. is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of the units to generate more light. See M.P.E.P. 2144.04.

Making the optical components interchangeable among the units is considered to be an obvious variation in design. Since the components are shown to be interchangeable (column 5 in lines 30-31, lines 40-45, lines 65-67), it would have been obvious to one of ordinary skill in the art at the time the invention was made to make them interchangeable among each unit to have a system with components exhibiting different optical qualities.

Concerning claim 73, Nagatani et al. discloses the portion of light influenced by the plural optical components has not previously passed through one of the plural optical components having light transmitting properties (Fig. 19).

Regarding claim 74, Nagatani et al. discloses a light guide forming a cavity (Fig. 19), a lamp (reference number 33-1) for directing light into the cavity (Fig. 19), and plural optical components (reference numbers 40 and 61) having different light directing properties for influencing the beam path of a portion of the light directed into the cavity that has not previously passed through one of the plural optical components having light transmitting properties (Fig. 19), a method of changing the light emission properties of a selected one of the plurality of units by interchanging optical components having different light directing properties (column 5, lines 30-65). Nagatani et al. does not disclose a plurality of units.

Using a plurality of units is considered to be an obvious duplication of parts. Since the unit disclosed in Nagatani et al. is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of the units to generate more light. See M.P.E.P. 2144.04.

9. Claims 43, 44, 51, 57 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. in view of Simon (U.S. Patent 5,988,841).

Concerning claims 43 and 57, Nagatani et al. does not disclose a replaceable cap reflector. Simon discloses a total reflective cap reflector (Fig. 4). The portion of the claims starting with "so that" and continuing to the end of the claim is considered to be functional language that is not given patentable weight. See M.P.E.P. 2114.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cap reflector of Simon in the apparatus of Nagatani et al. to make the reflector replaceable. See column 5, lines 35-40 of Simon. (The collector/projector module, reference number 14, has the reflector in it, and it is interchangeable.)

Regarding claim 44, Nagatani et al. does not disclose an interchangeable cap reflector. Simon discloses a cap reflector having reflecting properties that affect the light emission properties of the light unit (reference number 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cap reflector of Simon in the apparatus of Nagatani et al. to make the reflector replaceable.

Regarding claim 51, Nagatani et al. does not disclose an interchangeable input reflector. Simon discloses an input reflector having reflecting properties and dimensions that affect the light emission properties of the unit (reference number 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cap reflector of Simon in the apparatus of Nagatani et al. to make the reflector replaceable.

Concerning claim 75, Nagatani et al. does not disclose a replaceable reflector. Simon discloses the cap reflector (reference number 14) as an element that is dimensioned so that it can be used in any one of the light units of the system. See column 5, lines 35-40 of Simon. (The collector/projector module, reference number 14, has the reflector in it, and it is interchangeable.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cap reflector of Simon in the apparatus of Nagatani et al. to make the reflector replaceable.

10. Claims 49, 59 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. in view of Koike et al. (U.S. Patent 5,982,540).

Regarding claim 49, Nagatani et al. does not disclose a spacer. Koike et al. discloses at least two plate elements (reference numbers 8 and 8') being separated by a spacer element resting on the light permeable plate (column 15, lines 17-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the spacer of Koike et al. in the apparatus of Nagatani et al. to have a layer of air between two plates.

Concerning claim 59, Nagatani et al. discloses the light permeable elements (reference numbers 40 and 61) being plate elements positioned on the light permeable plate (34J, Fig. 19). Nagatani et al. does not disclose a spacer. Koike et al. discloses a spacer element being

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disposed between adjacent plate elements and secured to the light permeable plate (column 15, lines 17-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the spacer of Koike et al. in the apparatus of Nagatani et al. to have a layer of air between two plates.

Regarding claim 70, Nagatani et al. discloses a support structure (Fig. 19), a light guide forming a cavity (Fig. 19), a lamp (reference number 33-1) for directing light into said cavity (Fig. 19), a carrier plate (reference number 34J) carried by the support structure and defining a light emitting surface of the cavity (Fig. 19), and an optical component (reference numbers 61 and 40) carried by the carrier plate formed by two or more light permeable elements (Fig. 19).

Nagatani et al. does not disclose adjacent light permeable elements being separated by a spacer element.

Koike et al. discloses adjacent light permeable elements being separated by a spacer element (column 15, lines 17-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the spacer of Koike et al. in the apparatus of Nagatani et al. to have a layer of air between two plates.

11. Claims 48, 61, 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. in view of Zou et al. (U.S. Patent 6,185,357).

Concerning claim 48, Nagatani et al. does not disclose a frame element. Zou et al. discloses the plate element (reference number 70) being held onto the light permeable plate by at least one frame element (Fig. 1a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Zou in the apparatus of Nagatani et al. to hold the apparatus together.

Concerning claim 61, Nagatani et al. does not disclose a frame element. Zou et al. discloses the light unit including a light permeable plate (reference number 85) and the at least one optical component is a plate element (reference number 70) held onto the light permeable plate by at least one frame element (reference number 54, Fig. 1a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Zou in the apparatus of Nagatani et al. to hold the apparatus together.

Regarding claim 63, Nagatani et al. discloses a light unit including a support structure (reference number 31, top), at least one hollow light guide with a cavity (Fig. 19), at least one lamp (reference number 33-1) for directing light into the cavity (Fig. 19), optical components (Fig. 19, top) having light directing properties for influencing the beam path of the light output from the lamp (Fig. 19), at least one of the optical components (reference number 61) being a light permeable component having a medium with a first index of refraction (the prism plate 61) with a medium of a second index of refraction different from the first (air, Fig. 19), the light permeable component being part of a light output device (Fig. 19) and the boundary surface being provided with a light-refractive structure for deflecting light in at least one plane directed perpendicular to a light exit face (Fig. 19), so that the light intensity distribution curve of the light emerging at the light exit face is influenced in this plane (Fig. 19), the light permeable component being a pre-fabricated light permeable component with predetermined dimensions (Fig. 19), the step of providing the pre-fabricated light permeable component (Fig. 19), providing a light permeable carrier plate (reference number 34J) having a generally smooth surface (Fig. 19), arranging at least one pre-fabricated light permeable component on the carrier plate in a

predetermined area of the carrier plate (Fig. 19). Nagatani et al. does not disclose the fastening step.

Zou et al. discloses the step of fastening the pre-fabricated light permeable component (reference number 70) and the carrier plate (reference number 85) so that they limit the cavity of the hollow light guide (Fig. 1a) wherein the carrier plate forms the outermost element of the light output device through which light is output (Fig. 1a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the configuration of Zou et al. in the apparatus of Nagatani et al. to achieve downward lighting. See Fig. 1a of Zou et al.

Concerning claim 64, Nagatani et al. does not disclose a portion of the carrier plate being uncovered by the light permeable component. Zou et al. discloses positioning the pre-fabricated light permeable component (reference number 70) on the carrier plate (Fig. 1a), the space on the carrier plate (reference number 85) adjacent the pre-fabricated light permeable component remaining uncovered by the component (Fig. 1a), the uncovered region having an area smaller than the area of the cover (carrier) plate covered by the component (Fig. 1a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the configuration of Zou et al. in the apparatus of Nagatani et al. to allow some light to bypass the light permeable component. See Fig. 1a of Zou et al.

Regarding claim 65, Nagatani et al. does not disclose a frame element. Zou et al. discloses the step of positioning a frame element (reference number 54) on the cover (carrier) plate in the uncovered region (Fig. 1a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Zou et al. in the apparatus of Nagatani et al. to support the apparatus.

Allowable Subject Matter

12. Claim 66 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter. The prior art fails to disclose the step of arranging at least two pre-fabricated light permeable components on the carrier plate with an uncovered region therebetween and positioning a spacer element in the uncovered region.

Response to Arguments

13. Applicant's arguments with respect to claims 1-63 and 67-70 have been considered but are moot in view of the new ground(s) of rejection.

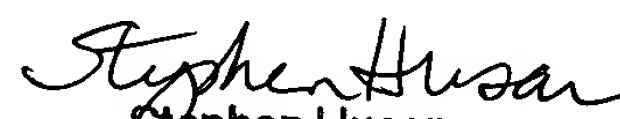
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (571) 272-2379. The examiner can normally be reached on regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sep


Stephen Husar
Primary Examiner